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10/595,501	01/29/2007	David J. Oles	081936/00007	1614

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EXAMINER
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RAVETTI, DANTE

ART UNIT	PAPER NUMBER
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3685

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11/17/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/595,501	<b>Applicant(s)</b> OLES, DAVID J.	
	<b>Examiner</b> DANTE RAVETTI	<b>Art Unit</b> 3685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Acknowledgements***

1. This communication is in response to the original Application No. 10/595,501 filed on May 8, 2009.
2. Claims 1-18 are currently pending and have been fully examined.
3. For the purpose of applying the prior art, PreGrant Publications will be referred to using a four digit number within square brackets, e.g. [0001].

### ***Examiner's Comments/Remarks***

4. Examiner would like to point out that the language of claim 1, and in others, describes, "non-functional descriptive material." For example, as to claim 1, Applicant recites, "...system controller further comprising executable computer instructions...." However, this is an example of non-functional descriptive material.<sup>1</sup> Applicant seems to be missing the language, "...when executed causes the computer to perform...."

As to claim 6, Applicant recites, "...said first preferred ration occurs **when** the amount...." The MPEP interprets claim limitations that contain "if, may, might, can, when and could" statement(s), as optional language. As matter of linguistic precision, optional claim elements do not narrow claim limitations, since they can always be omitted.<sup>2</sup> Language that suggests or makes optional but does not require steps to be

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<sup>1</sup> In re Gulack, 217 USPQ 401 (Fed. Cir. 1983), In re Ngai, 70 USPQ2d (Fed. Cir. 2004), In re Lowry, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.01 II; Where the printed matter is not functionally related to the substrate, the printed matter will not distinguish the invention from the prior art in terms of patentability .... [T]he critical question is whether there exists any new and unobvious functional relationship between the printed matter and the substrate;

<sup>2</sup> In re Johnston, 77 USPQ2d 1788 (Fed. Cir. 2006);

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performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.<sup>1</sup>

Claim 7 contains similar language.

### ***Response to Applicant's Remarks/Amendments***

5. In response to Applicant's remarks filed on May 8, 2009 have been fully considered, but are moot in light of new grounds for rejection.

Applicant argues:

For instance, each of Applicant's claims particularly requires (whether by way of an executable computer instruction configured to carry out a specific function or by way of a particular method step) initially causing a disproportionate amount of consumable media to be used in a second output print device compared to a first output print device until the amount of consumable media in the first output print device is in a first preferred ratio to the amount of consumable media in the second output print device, at which point it alternates the usage of consumable media between the two print devices until the second output print device is exhausted.

However, Shimada expressly teaches:

In a network system which includes multiple printers, when a problem is detected in any one of the printers performing a print, another normally functioning printer is selected to substitute for the printer in which the problem is detected. In order to ensure that quality of the images printed by the selected substitute printer is the same as that of the images printed by the printer in which the problem is detected, the print data is corrected and is outputted to the selected substitute printer (Abstract);

(12) Another object of the present invention is to provide (i) **a printer control device and method, such that where a failure occurs in a printer performing printing in a network circuit to which multiple printers are connected, printing is continued using a substitute printer in a manner that ensures that the color or gradation characteristics of the images printed by the substitute printer after the failure are not different from the color or gradation characteristics of the images printed by the printer in which the failure occurred before the occurrence of the failure,** and (ii) a computer program product for this control.

(13) In order to attain these and other objects, one aspect of the present invention comprises a printer control device that controls multiple printers connected to a network circuit, said printer control device having (i) a detector that detects a problem in any of the printers, (ii) selection control in which, when a problem is detected by the detector, another normally functioning printer is selected to substitute for the printer in which the problem was detected, and (iii) substitution control in which (a) correction is made to the print data that was to have been printed out by the printer in which the problem occurred, to ensure that the quality of the images printed by the selected substitute printer is the same as that of the images printed by the printer in which the problem occurred, and (b) the corrected print data is output to the selected substitute printer.

Therefore, the Examiner respectfully disagrees with the Applicant and maintains his rejection.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. §101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1-18 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter.

As to claim 1, 35 USC §101 requires that in order to be patentable the invention must be a "new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" (emphasis added). The applicants claims mentioned above are intended to embrace or overlap two different statutory classes of invention as set forth in 35 USC §101. The claims begin by discussing a **apparatus**, but subsequently the claims then deal with the specifics of a **method** (e.g. the steps to perform) executed by the processing means (see rejection of claims under 35 USC §112, 2nd paragraph, for specific details regarding this issue).<sup>3</sup>

Claims 2, 11-12 and 15 contains similar language or like deficiencies. The appropriate correction is required.

Claims 6-10 and 16-18 are also rejected for being dependent upon rejected claims 1-2, 11-12 and 15.

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<sup>3</sup> Ex parte Lyell (17 USPQ2d 1548); "A claim of this type is precluded by the express language of 35 USC 101 which is drafted so as to set forth the statutory classes of invention in the alternative only...."

Claims 3-4 and 13-14 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Based on Supreme Court precedent<sup>4</sup> and recent Federal Circuit decisions, a §101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform the underlying subject matter (such as an article or materials) to a different state or thing. In addition, the tie to a particular apparatus, for example, cannot be mere extra-solution activity.<sup>5</sup>

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps.

To meet prong (1), the method step should positively recite the other statutory class (the thing or product) to which it is tied. This may be accomplished by having the claim positively recite the machine that accomplishes the method steps. Alternatively or to meet prong (2), the method step should positively recite identifying the material that is being changed to a different state or positively recite the subject matter that is being transformed.

In this particular case, claim 3 fails prong (1) because there exist no “tie” to another statutory class (such as a particular apparatus) to perform the following steps of:

providing a first output...

providing a second output...

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<sup>4</sup> Diamond v. Diehr, 450 U.S. 175, 209 USPQ 1 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70, 71 (1972); Cochrane v. Deener, 94 U.S. 780, 787-88 (1876). The Supreme Court recognize that this test is not necessarily fixed or permanent and may evolve with technological advances;

<sup>5</sup> See In re Bilski, 88 USPQ2d 1385 (Fed. Cir. 2008);

providing a system controller...

Therefore, claim 3 does not meet the requirements of the first prong (1).

Additionally, the claim(s) 3 fail prong (2) because the method steps do not transform the underlying subject matter to a different state or thing

Claims 6-10 and 16-18 are also rejected for being dependent upon rejected claims 3-4 and 13-14. The appropriate correction is required.

Claim 5 is directed to a "program product." A "program product" is software, and according to the MPEP, software, without a computer readable medium storing the software when executed, causes the computer to perform specific method steps, is non-functional descriptive material and is therefore rejected under 35 U.S.C §101 (MPEP §2106.01). A "computer program", as claimed, is not one of the four statutory classes of invention, as it is merely data. The appropriate correction is required.

Claim 15 contains similar language or like deficiencies. The appropriate correction is required.

Claims 6-10 and 16-18 are also rejected for being dependent upon rejected claims 5 and 15.

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***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Shimada, (US 7,221, 465) ("Shimada") and in view of Smith et al., (US 2003/0149917) ("Smith").

**As to claims 1-4 and 11-14:**

Shimada teaches substantially as claimed:

a first output print device with consumable media (Figure 1, Claims1, 16, 25);

a second output print device with consumable media (Figure 1, Claims1, 16, 25);  
and

Shimada does not expressly teach:

a system controller that controls the utilization of consumable media of said first output print device and said second output print device, said system controller further comprising executable computer instructions to:

(i) initially cause a disproportionate amount of utilization of consumable media to be produced from said second output print device compared to said first output print device, and to continue the disproportionate amount of utilization of consumable media from said second output print device until the amount of consumable media of said first output print device is in a first preferred ratio compared to the amount of consumable media in said second output print device;

(ii) in response to achieving said first preferred ratio between the consumable media of said first output print device and said second output print device, alternate utilization of consumable media between said first output print device



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and said second output print device until said second output print device exhausts its consumable media;

(iii) in response to replenishment of the consumable media of said second output print device, cause a disproportionate amount of utilization of consumable media to be produced from said second output print device compared to said first output print device, and to continue the disproportionate amount of utilization of consumable media until the amount of consumable media of said second output print device is in a second preferred ratio compared to the amount of consumable media in said first output print device;

(iv) in response to achieving said second preferred ratio between the consumable media of said second output print device and said first output print device, alternate utilization of consumable media between said second output print device and said first output print device until said first output print device exhausts its consumable media;

(v) in response to replenishment of the consumable media of said first output print device, cause a disproportionate amount of utilization of consumable media to be produced from said first output print device compared to said second output print device, and to continue the disproportionate amount of utilization of consumable media until the amount of consumable media of said first output print device is in said first preferred ratio compared to the amount of consumable media in said second output print device; and

(vi) maintain continued utilization of consumable media by repeating functions (ii) through (v);

replenishing consumable media in said second output print device after each occurrence of said second output print device exhausting its consumable media; and

replenishing consumable media in said first output print device after each occurrence of said first output print device exhausting its consumable media.

However, Smith expressly teaches:

a system controller that controls the utilization of consumable media of said first output print device and said second output print device, said system controller further comprising executable computer instructions to ([0033]):

(i) initially cause a disproportionate amount of utilization of consumable media to be produced from said second output print device compared to said first output print device, and to continue the disproportionate amount of utilization of

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consumable media from said second output print device until the amount of consumable media of said first output print device is in a first preferred ratio compared to the amount of consumable media in said second output print device ([0033]);

(ii) in response to achieving said first preferred ratio between the consumable media of said first output print device and said second output print device, alternate utilization of consumable media between said first output print device and said second output print device until said second output print device exhausts its consumable media ([0033]);

(iii) in response to replenishment of the consumable media of said second output print device, cause a disproportionate amount of utilization of consumable media to be produced from said second output print device compared to said first output print device, and to continue the disproportionate amount of utilization of consumable media until the amount of consumable media of said second output print device is in a second preferred ratio compared to the amount of consumable media in said first output print device ([0033]);

(iv) in response to achieving said second preferred ratio between the consumable media of said second output print device and said first output print device, alternate utilization of consumable media between said second output print device and said first output print device until said first output print device exhausts its consumable media ([0033]);

(v) in response to replenishment of the consumable media of said first output print device, cause a disproportionate amount of utilization of consumable media to be produced from said first output print device compared to said second output print device, and to continue the disproportionate amount of utilization of consumable media until the amount of consumable media of said first output print device is in said first preferred ratio compared to the amount of consumable media in said second output print device ([0033]); and

(vi) maintain continued utilization of consumable media by repeating functions (ii) through (v) ([0033]).

replenishing consumable media in said second output print device after each occurrence of said second output print device exhausting its consumable media ([0033]); and

replenishing consumable media in said first output print device after each occurrence of said first output print device exhausting its consumable media ([0033]).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada to include the features of Smith because in a printer network system it maybe desirable to control printer operation to ensure proper operation of printer jobs.

**As to claims 5 and 15:**

Shimada expressly teaches:

using consumable media with a first output print device (Figure 1, Claims 16, 25);

using consumable media with a second output print device (Figure 1, Claims 16, 25); and

Shimada does not expressly teach:

controlling the utilization of consumable media of said first output print device and said second output print device with a system controller, said controlling step further comprising:

(i) initially causing a disproportionate amount of utilization of consumable media to be produced from said second output print device compared to said first output print device, and continuing the disproportionate amount of utilization of consumable media from said second output print device until the amount of consumable media of said first output print device is in a first preferred ratio compared to the amount of consumable media in said second output print device;

(ii) in response to achieving said first preferred ratio between the consumable media of said first output print device and said second output print device, alternating utilization of consumable media between said first output print device and said second output print device until said second output print device exhausts its consumable media;

(iii) in response to replenishment of the consumable media of said second output print device, causing a disproportionate amount of utilization of consumable media to be produced from said second output print device compared to said first output print device, and continuing the disproportionate amount of utilization of consumable media until the amount of consumable media of said second output print device is in a second preferred ratio compared to the amount of consumable

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media in said first output print device;

(iv) in response to achieving said second preferred ratio is between the consumable media of said second output print device and said first output print device, alternating utilization of consumable media between said second output print device and said first output print device until said first output print device exhausts its consumable media;

(v) in response to replenishment of the consumable media of said first output print device, causing a disproportionate amount of utilization of consumable media to be produced from said first output print device compared to said second output print device, and continuing the disproportionate amount of utilization of consumable media until the amount of consumable media of said first output print device is in said first preferred ratio compared to the amount of consumable media in said second output print device;

(vi) maintaining continued utilization of consumable media by repeating steps (ii) through (v).

However Smith expressly teaches:

controlling the utilization of consumable media of said first output print device and said second output print device with a system controller, said controlling step further comprising ([0033]):

(i) initially causing a disproportionate amount of utilization of consumable media to be produced from said second output print device compared to said first output print device, and continuing the disproportionate amount of utilization of consumable media from said second output print device until the amount of consumable media of said first output print device is in a first preferred ratio compared to the amount of consumable media in said second output print device ([0033]);

(ii) in response to achieving said first preferred ratio between the consumable media of said first output print device and said second output print device, alternating utilization of consumable media between said first output print device and said second output print device until said second output print device exhausts its consumable media ([0033]);

(iii) in response to replenishment of the consumable media of said second output print device, causing a disproportionate amount of utilization of consumable media to be produced from said second output print device compared to said first output print device, and continuing the disproportionate amount of utilization of consumable media until the amount of consumable media of said second output

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print device is in a second preferred ratio compared to the amount of consumable media in said first output print device ([0033]);

(iv) in response to achieving said second preferred ratio is between the consumable media of said second output print device and said first output print device, alternating utilization of consumable media between said second output print device and said first output print device until said first output print device exhausts its consumable media ([0033]);

(v) in response to replenishment of the consumable media of said first output print device, causing a disproportionate amount of utilization of consumable media to be produced from said first output print device compared to said second output print device, and continuing the disproportionate amount of utilization of consumable media until the amount of consumable media of said first output print device is in said first preferred ratio compared to the amount of consumable media in said second output print device ([0033]);

(vi) maintaining continued utilization of consumable media by repeating steps (ii) through (v) ([0033]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada to include the features of Smith because in a printer network system it maybe desirable to control printer operation to ensure proper operation of printer jobs.

**As to claim 6:**

Shimada expressly teaches:

wherein said first preferred ratio occurs when the amount of consumable media of said first output print device minus the amount of consumable media of said second output print device equals half the amount of consumable media available when said first output print device and said second output print device are both full of consumable media ((Col. 1, lines 50-67), (Col. 2, lines 6-42), (Col., lines 40-48), (Col. 8, lines 38-50), Figure 2, Claims 1-5);

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**As to claim 7:**

Shimada expressly teaches:

wherein said second preferred ratio occurs when the amount of consumable media of said second output print device minus the amount of consumable media of said first output print device equals half the amount of consumable media available when said second output print device and said first output print device are both full of consumable media ((Col. 1, lines 50-67), (Col. 2, lines 6-42), (Col., lines 40-48), (Col. 8, lines 38-50), Figure 2, Claims 1-5);

**As to claims 8 and 16:**

Shimada expressly teaches:

wherein said first output print device or said second output print device further comprises a dye sublimation printer and wherein the consumable media further comprises dye transfer ribbons, paper, and protective overcoat laminate ((Col. 1, lines 50-67), (Col. 2, lines 6-42), (Col., lines 40-48), (Col. 8, lines 38-50), Figure 2, Claims 1-5);

**As to claims 9 and 17:**

Shimada expressly teaches:

wherein said first output print device or said second output print device further comprises an inkjet printer and wherein the consumable media further comprises inkjet print cartridges and paper ((Col. 1, lines 50-67), (Col. 2, lines 6-42), (Col., lines 40-48), (Col. 8, lines 38-50), Figure 2, Claims 1-5);

**As to claims 10 and 18:**

Shimada expressly teaches:

wherein said first output print device further comprises a first logical output print device and said second output print device further comprises a second logical output print device, said first logical output print device further comprising one or more physical output print devices, and said second logical output print device further comprising one or more physical output print devices ((Col. 1, lines 50-67), (Col. 2, lines 6-42), (Col., lines 40-48), (Col. 8, lines 38-50), Figure 2, Claims 1-5);

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communication from the examiner should be directed to Mr. Dante Ravetti whose telephone number is (571) 270-3609. The examiner can normally be reached on Monday – Thursday 9:00am-5:00pm.

If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Calvin Hewitt may be reached at (571) 272-6709. The

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fax phone number for the organization where this application or proceeding is assigned is (571) 270-4609.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, please contact the Electronic Business Center (EBC) at 1-(866) 217-9197. If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 1-(800) 786-9199 (IN USA or CANADA) or 1-(571) 272-1000.

/Dante Ravetti/  
Examiner, Art Unit 3685  
Thursday, September 17, 2009

/ANDREW J. FISCHER/  
Supervisory Patent Examiner, Art Unit 3621